

Tomáš Meravý Murárik  
127232

## Bonus Assignment – 7

program :

```
#!/bin/bash
```

Function to anonymize IP address by performing + 100 on each octet and using modulo 255 as value of new octet.

```
anonymize_ip() {  
    local ip="$1"  
    Dividing the string by octets.  
    IFS='.' read -r -a octet <<< "$ip"  
  
    Forloop where we perform the untraceable operation (+1 would be fine too).  
    for i in {0..3}; do  
        octet[i]=$(( (octet[i] + 100) % 255 ))  
    done  
    Return the new address in string format  
    echo "${octet[0]}.${octet[1]}.${octet[2]}.${octet[3]}"  
}
```

```
while IFS= read -r line; do  
    # Extract the first field ( ip)  
    ip=$(echo "$line" | awk '{print $1}')  
    My function returns new superuntraceable address!  
    We call regex on line where we swap the ip with new address and append it to file.  
    echo "${line/$ip/${anonymize_ip "$ip"}}" >> "anon.log"  
done < "access.log"
```

```
25 [mary@Windows95 os_bonus_7]$ ./script.sh  
24 [mary@Windows95 os_bonus_7]$ awk '{print $1}' anon.log | sort | uniq -c | sort -nr | head  
23 482 166.94.173.235  
22 364 146.205.114.153  
21 357 230.82.63.186  
20 273 175.197.109.159  
19 113 150.116.119.113  
18 102 54.185.83.44  
17 99 168.25.69.70  
16 84 200.143.183.237  
15 83 53.215.211.172  
14 82 43.146.249.243  
13 [mary@Windows95 os_bonus_7]$ awk '{print $1}' access.log | sort | uniq -c | sort -nr | head  
12 awk: fatal: cannot open file `access.log' for reading: No such file or directory  
11 [mary@Windows95 os_bonus_7]$ awk '{print $1}' access.log | sort | uniq -c | sort -nr | head  
10 482 66.249.73.135  
9 364 46.105.14.53  
8 357 130.237.218.86  
7 273 75.97.9.59  
6 113 50.16.19.13  
5 102 209.85.238.199  
4 99 68.180.224.225  
3 84 100.43.83.137  
2 83 208.115.111.72  
1 82 198.46.149.143  
0 [mary@Windows95 os_bonus_7]$ █  
1  
2
```